CLAIMS

1. In a fuel cell separator having provided in an outer peripheral part multiple gas passages for guiding reaction gases and multiple reaction product passages for guiding a reaction product, the reaction gases being guided from the gas passages to a central part and reaction product produced at the central part being guided to the reaction product passages,

the fuel cell separator characterized in that the central part comprises a metal member, the peripheral part comprises a rubber member, and a projecting part surrounding the central part is formed integrally with the rubber member.

2. A fuel cell separator according to claim 1, wherein the rubber member is made of silicone rubber.

3. A method for manufacturing a fuel cell separator having provided in a silicone rubber peripheral part multiple gas passages for guiding reaction gases and multiple reaction product passages for guiding a reaction product, reaction gases being guided from the gas passages to a metal central part and reaction product produced at the central part being guided to the reaction product passages, characterized in that the method includes:

a step of disposing the metal central part in a cavity of an injection-molding mold;

a step of keeping the inside of this cavity at a low temperature so that the silicone rubber does not reactively set and maintains a low viscosity;

a step of injecting liquid silicone rubber into the cavity in this state and guiding it to an edge part of the central part; and

a step of heating the inside of the cavity to reactively set the silicone rubber guided to the edge part of the central part.

4. A method for manufacturing a fuel cell separator having provided in a silicone rubber peripheral part multiple gas passages for guiding reaction gases and multiple reaction product passages for guiding a reaction product, reaction gases being guided from the gas passages to a metal central part and reaction product produced at the central part being guided to the reaction product passages, characterized in that the method includes:

a step of disposing the metal central part in a cavity of an injection-molding mold;

a step of keeping the inside of this cavity at a low temperature so that the silicone rubber does not reactively set and maintains a low viscosity;

a step of injecting liquid silicone rubber into the cavity in this state and guiding it to an edge part of the central part; and

a step of heating the central part to reactively set the silicone rubber guided to the edge part of the central part.